Backup strategies and tape rotation

Why take five?

Backup strategies and tape rotation

Computer data is „mission critical" and no company should risk their business because they have not taken the necessary precautions to protect their vital data. A proper backup strategy is the most effective insurance against data loss due to the risk of fire, theft, disk crash, natural disaster or human error. These events can all cause data loss and result in time consuming data recovery operations.

Full and differential backup

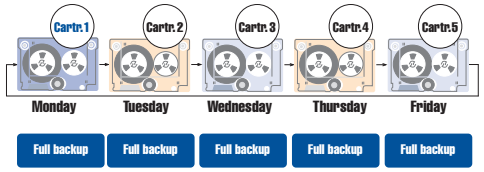
Can be combined in several ways. A full backup should always be kept in a safe (off-site) location. In a full backup, all data is copied on the tape. In a differential backup, all data that is changed since the last full backup is copied on the tape.

Backup strategies for the small office

Below are various suggested tape rotation schemes for small office backup.
These schemes are showing backup strategies which are acceptable as an absolute minimum.

Simple 5 day rotation, 5 cartridges

- Five cartridges, each assigned for different days of the week
- Full backup each night. Always store the last completed backup off-site overnight.

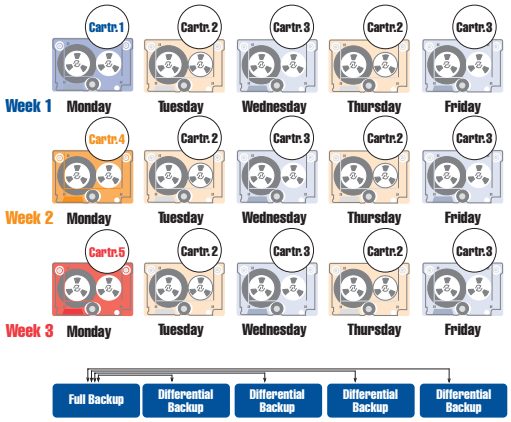


Three golden rules for backup

- Tape rotation – don't use the same cartridge two days in a row!
- Offsite copy – store a complete backup offsite!
- Every day – a backup's validity has short duration!

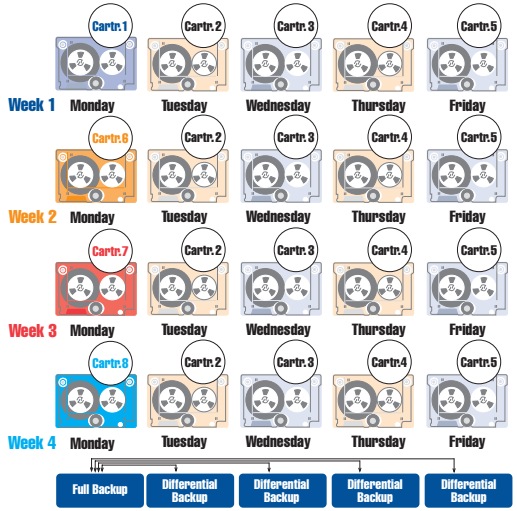
5 day / 3 week rotation, 5 cartridges

- Three cartridges for full weekly backup, Each cartridge used every 3rd week (Cartr. 1, 4, 5)
- Two cartridges assigned for daily, differential backup



5 day / 4 week rotation, 8 Cartridges

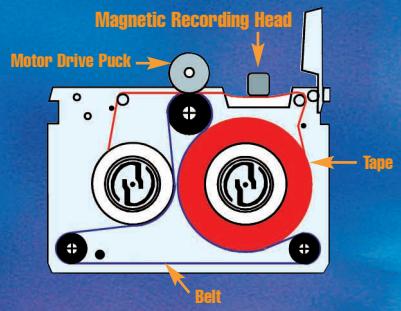
- Four cartridges are assigned for full weekly backups (Cartr. 1, 6, 7, 8)
- Four cartridges are assigned for daily differential backups (Cartr. 2-5)



SLR Cartridge - Technology

What is SLR-Technology?

SLR (Scalable Linear Recording) - developed and manufactured by TANDBERG DATA - is based on linear technology and adds a new dimension to data cartridge tape drives. Large increases in recording speed and capacity are made possible by using multiple write and read channels in parallel for data recording. For surpreme data integrity, SLR technology uses an additional read channel to follow a prerecorded servo-track on the tape. This servo positioning of the recording head ensures data integrity. Backward compatibility is one of the special benefits of the SLR technology ensuring that at least two developed standards can be read without problem.



Highlights of SLR Cartridge Technology

- Few moving parts in drive and cartridge ensure high reliability
- Rigid Aluminum base plate
- Tape remains completely protected inside the cartridge
- 20 year minimum data retention
- Wide temperature and humidity range

Highlights of SLR Tape Drives

The Tandberg Data SLR™ Tape Drive family offers the industry's highest reliability in tape storage management solutions. Designed for the needs of growing storage requirements, they offer unmatched scalability, backward compatibility and integration into Tandberg SLR Automation products.

- Storage capacity up to 140* GB
- Transfer rates up to 43,2* GB/hr
- Annual average field return rate of less than 1,5%
- Supported by all a major operating systems and backup software suppliers
- Highest reliability in the industry
- 30 years experience as tape manufacturer